COMMITTEE ON GOVERNMENT REFORM

Subcommittee on Energy and Resources

DARRELL ISSA, CHAIRMAN

Oversight Hearing:

Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?

February 15, 2006, 2:00pm
Rayburn House Office Building
Room 2203

BRIEFING MEMORANDUM

INTRODUCTION

In response to emissions of certain chemicals which contributed to the depletion of the Earth's stratospheric ozone layer, the United States entered into the 1987 Montreal Protocol (the "Protocol"), the aim of which was the gradual elimination of the use, production, and trade of so-called Ozone Depleting Substances. Methyl Bromide was identified as one such substance in 1992, and it is regulated globally under the Protocol, as amended in 1992 and adjusted in 1997, and domestically under Title VI of the U.S. Clean Air Act, as amended in 1993 and in 1998.

Methyl Bromide is a widely used biocide in the U.S. agricultural community because of its effectiveness at killing insects and plant pathogens. Accounting for 40% of global usage, U.S. farmers use it extensively for pre-planting, post-harvest, quarantine, and pre-shipping treatments. The use and production for anything other than quarantine and pre-shipment was to be completely phased-out for non-developing nations under the Protocol by January 1, 2005.[1]

It was hoped that the phase-out would allow the agricultural industry to continue to use Methyl Bromide, while at the same time, force it to seek out and use suitable alternatives. In addition to the millions invested by the private sector, the U.S. government has spent over $200 million in research and development in pursuit of a substitute for Methyl Bromide. To date, a suitable, wide-scale alternative has yet to emerge[2] and the need for Methyl Bromide is as critical as ever. The Protocol provides for an exemption from the phase-out deadline.

[1] Developing nations are exempt from the January 1, 2005 deadline.
[2] There are a number of proposed alternatives, but none reaches the effectiveness level of Methyl Bromide.

The United States has applied for three Critical Use Exemptions since 2003. The lead agencies (EPA, USDA, and the State Department) are somewhat comfortable with the application process. The private sector, on the other hand, believes that international parties may be using the Protocol and the Critical Use Exemption process as a way to gain a competitive edge on the U.S. agricultural industry. Both agree, however, that there is considerable room for improvement, especially in the areas of transparency, predictability, and timeliness of the rulemaking process.

This hearing will examine the Critical Use Exemption application process and whether United States interests are adequately protected.

BACKGROUND

Methyl Bromide is a gaseous chemical that is highly effective at killing molds, other fungi, insects, and worm (nematode) infestations of crops. It is widely used by U.S. growers to treat soils prior to planting, to treat post-harvested commodities such as fruits, vegetables, dried foodstuffs, stored grains, cut flowers, and timber, and for quarantine and pre-shipment treatments for import/export. Its ozone depleting properties qualify it as an ozone depleting substance under the Montreal Protocol, and correspondingly so under Title VI of the Clean Air Act.[3] Its use and production, other than for quarantine and pre-shipment, were scheduled for complete phase-out by January 1, 2005.

The U.S. has complied with the phase-out process, but has been unable to fully wean itself off the use of Methyl Bromide because its effectiveness is unparalleled and there is no alternative available that can be used in the same fashion as Methyl Bromide. In 2007, the U.S. will use 73.75% less than the amount of Methyl Bromide it consumed in 1991.[4] To date, the U.S. government and private institutions have invested well in excess of $200m in research and development to find alternatives to Methyl Bromide so it can reduce this amount to 0%. Unfortunately, a suitable replacement has yet to emerge though numerous attempts have been made.[5] As such, the U.S. is forced to apply for Critical Use Exemptions to the Montreal Protocol on an annual basis to allow it to continue to use and produce Methyl Bromide.

THE CRITICAL USE EXEMPTION PROCESS

The Protocol, as amended in 1998, allows countries to continue to produce and use Methyl Bromide, via a Critical Use Exemption, beyond the January 1, 2005 phase-out

[3] Title VI of the Clean Air Act enforces the Montreal Protocol.

[4] The amount of Methyl Bromide consumed in 1991 is also known as "baseline". For example, 26.25% of baseline is equal to 26.25% of the amount of Methyl Bromide used in 1991. Baseline is used as a reference point by which to track Methyl Bromide reduction under the Protocol.

[5] Since 1995, there have been 10 new registrations for "niche" uses: Phosphine (insects in stored products); 1,3-D (application via drip); Halosulfuron (weeds in fruiting vegetables); s-Metolachlor (weeds in tomatoes); Sulfuryl Flouride (insects in stored grains, dried fruit, nuts, mills); Idomethane (tomatoes, strawberries, pepper and ornamentals); Sodium Azide (ornamentals and turf); and Furfural (greenhouse, turf and ornamentals)

deadline. The annual process, which requires close to 20,000 man hours and millions of dollars, contains several steps and begins two years prior to the target usage year. Step one is the application phase, step two is the review phase, step three is the final determination made by the Meeting of the Parties, and step four is the rulemaking phase.

The U.S. application process begins with the individual farmer. Growers prepare a very detailed application for EPA, setting out their efforts to find alternatives, the reasons why alternatives do not work, if in fact they do not, and the economic reasons why they must continue to use Methyl Bromide. In addition, they provide, based upon past usage, an estimate of the amount of Methyl Bromide they intend to use. Grower coalitions, such as the California Strawberry Commission, submit the applications to the EPA on behalf of their members.

The EPA reviews and as necessary supplements this information and determines what amount of Methyl Bromide the U.S. should ultimately request. This is called the nomination. From there, the State Department submits the nomination package to the Secretariat for the Montreal Protocol (not U.N. affiliated) for initial review by the Methyl Bromide Technical Options Committee ("MBTOC"). It is important to keep in mind that the United States is the only party to the Montreal Protocol that submits its Critical Use Exemption application with such detail and precision.

MBTOC examines the percentage of baseline requested in light of technical feasibility. To this end, it determines whether the U.S. has pursued technically viable alternatives for the use in the context of the application, whether there is a continued effort to limit emissions, and whether there is a continued effort to find alternatives. At the conclusion of this study, they make a recommendation, which may be higher or lower than the percentage requested, and submit it to the Technical Economic Assessment Panel ("TEAP") for its review.

TEAP examines the application in light of economic feasibility. To this end, TEAP will consider whether there are any economically viable alternatives, and whether the absence of Methyl Bromide would cause a significant market disruption. At this time, MBTOC and TEAP may request additional information or seek clarification from the U.S. team.

Ultimately, TEAP will make what they consider to be an appropriate baseline percentage recommendation, which again may be higher or lower than the nomination, to the Meeting of the Parties ("MOP").

The MOP is tasked with considering the recommendations of the MBTOC and TEAP, on the one hand, and the nomination from the U.S., on the other, in light of policy concerns. Like MBTOC and TEAP, MOP is comprised of representatives from member countries, including the United States. But unlike MBTOC and TEAP, it is the final arbiter and it can either accept or reject the recommendations by MBTOC and TEAP.[6] This meeting is held behind closed doors and the final rule cannot be appealed.

[6] It can also accept in part, and reject in part. For example, for 2005, it authorized 37.5% of baseline, but mandated that 7.5% be drawn from stocks.

Once MOP grants a CUE and a corresponding baseline percentage, the EPA must promulgate a rule in accordance with Title VI of the Clean Air Act. To this end, it must engage in a lengthy notice and comment period. For example, the EPA just released the rule for the 2006 nominations in January 2006. This should have been completed sometime during the 4th Quarter of 2005, so both the users and producers could plan their planting accordingly.

The United States has had considerable experience with the Critical Use Exemption process.

U.S. EXPERIENCE WITH CRITICAL USE EXEMPTIONS

The United States has applied for three Critical Use Exemptions and is in the process of applying for a fourth. The following chart shows what percentage of baseline was nominated by the U.S. and what percentage the MOP authorized for each year.[7]

Abbreviations:
MOP: Meeting of the Parties (the annual meeting)
Ex-MOP: Extraordinary Meeting of the Parties (when the MOP meets more than once a year to review or resolve difficulties with nominations)

Year	Amt. Nominated	Amt. Authorized	Date of Authorization
2005	39%	35%	1st Ex-MOP (Mar. 2004)
2005 Supplemental	2.5%	2.5%	16th MOP (Nov. 2004)
TOTAL		**37.5%**	
2006	35%*	32%	16th MOP/2nd Ex-MOP (July 2005)
2006 Supplemental	.03%	.03%	17th MOP (Dec. 2005)
TOTAL		**32.03%**	
2007	29%	26.4%	17th MOP (Dec. 2005)
2008	25%	n/a	n/a

*While 37% was originally nominated for 2006, the number was later revised down to 35% due to recommendations from the Methyl Bromide Technical Options Committee (MBTOC).

[7] Source: Environmental Protection Agency.

These percentages can be further broken down into the percentage to come from new production and the percentage to come from available stocks. For each year, those percentages are:

Year	New Production Authorized	Amt. to be Supplemented by Stocks
2005	30%	7.5%
2006	27%	5.03%
2007	20%	6.4%

The government, as well as the private sector, has encountered considerable difficulty with the Critical Use Exemption process.

LIMITATIONS OF THE CRITICAL USE EXEMPTION PROCESS

Both the government and the private sector have expressed concerns over the Critical Use Exemption process. These are:

- **Lack of Transparency.** There is considerable uneasiness over the lack of transparency in the MOP's decision making process. As outlined above, this meeting is held behind closed doors and the final ruling cannot be appealed. The U.S. cannot represent itself and there are no transcripts available for review. This causes great concern because there is no way to determine the basis of the MOP's decision. Consequently, the U.S. can only trust that the MOP bases its decision upon sound public policy. Some find this difficult to swallow, however, especially when member countries serving on the MOP also compete with the U.S.' agricultural market. Could they be declining to authorize the nominated amount of Methyl Bromide to gain a competitive edge? Also, if the full amount of Methyl Bromide is not authorized, how is the U.S. supposed to know where it went wrong in its application phase?

- **Lack of Predictability.** The lack of transparency also fosters a lack of predictability in the authorization process. Granted, the purpose of the Montreal Protocol is the gradual elimination of certain ozone depleting substances, namely, Methyl Bromide, and those responsible for its enforcement should accomplish this by reducing the authorized amount each year. The problem is that there is no set reduction amount, and there is no pattern by which the U.S. can predict the amount likely to be authorized in the future. This leaves the U.S. and its growers in a perpetual state of uncertainty.

- **Appeals Process.** As previously stated, the MOP meets behind closed doors and its decision cannot be appealed. Consequently, the U.S. never knows why the MOP consistently grants less than the nominated amount and even if it did, it could never appeal the decision. As such, the U.S. must accept the decision on its face without ever knowing the MOP's reasoning. This is inefficient,

particularly when the annual Methyl Bromide authorization is so critical to the functions of the U.S. agricultural industry.

- **Stocks.** Many growers are concerned about the use of stocks to supplement the authorized baseline percentage. The MOP's practice has been to authorize an amount of Methyl Bromide to be produced and consumed, but then out of that total, mandate that a certain percentage of baseline be taken from Methyl Bromide stocks around the country. There are two problems with this. First, many producers do not believe that the Protocol contemplates the use of stocks to supplement baseline percentage and anything to the contrary is merely an artificial production cap. For example, in 2005 the MOP decided that U.S. production and consumption of Methyl Bromide should be limited to 37.5% of baseline. Out of this, it mandated that 7.5% should come from stocks. Producers deem this to be the MOP's attempt to artificially curb production by the amount of Methyl Bromide believed to be held in stocks. This problem is only further intensified by the fact that nobody really knows how much Methyl Bromide is in stock because it is so widely used throughout the country. This creates another problem in that not only are the producers capped, but if it should turn out that the U.S. does not have enough in stocks to cover the percentage, the growers will not have enough to use *and* the producers will not be able to make up for the shortfall.

- **Lack of Efficient Administrative Process.** There is also great concern over the rulemaking process as provided by Title VI of the Clean Air Act. In order to put the authorized use and production percentages into practice, the EPA must issue a rule. This process, however, consumes the better part of seven months to complete because the EPA must engage in a lengthy notice and comment period. The problem is that the EPA does not begin the notice and comment period until after the MOP has published the authorized amounts. This does not give farmers enough time to plan for the target year. For example, the EPA rule announcing the 2006 authorization was not published until January 26, 2006. This means that growers throughout the nation did not know whether, and in what amount, they could use Methyl Bromide for nearly the entire month of January.

PROPOSED LEGISLATION

On March 10, 2005, Rep. George Radanovich introduced H.R. 1257, which proposed to amend the Clean Air Act to authorize critical use exemption amounts for Methyl Bromide as identified by the U.S. State Department for the years 2006 and 2007. This approach, also known as a multi-year approach, would allow the EPA to promulgate one rule that regulates multiple years of authorizations instead of engaging in a lengthy rulemaking process on an annual basis. As it stands, growers are only guaranteed usage from one calendar year to the next. Though only for the years 2006 and 2007, this bill would have provided growers with more stability and predictability when planning how to use their Methyl Bromide allotments. It was also hoped that with an extra year of breathing room, growers would branch out and test new products while having the safety

net of Methyl Bromide. Moreover, a multi-year approach would save a considerable amount of money and effort.

ISSUES TO BE ADDRESSED AT THE HEARING

- Whether U.S. interests are served by the Critical Use Exemption process;
- Whether, through the Critical Use Exemption process, the Protocol itself strikes the right balance between safeguarding the environment and protecting the U.S. agricultural economy;
- Whether, and to what extent, new legislation is necessary to facilitate the EPA rulemaking process; and
- Whether it is possible to achieve transparency and predictability in the Critical Use Exemption process through "multi-year" legislation.

WITNESSES

- William Wehrum, Acting Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency

- Michelle Castellano, Vice President, Mellano & Company (San Luis Rey, CA)

- James Bair, Vice President, North American Millers' Association

- David Doniger, Senior Attorney, National Resources Defense Council

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